

X. DESCRIPTIONS OF SOME NEW SPECIES AND VARIETIES OF RHOPALOCERA IN THE CARNEGIE MUSEUM.

BY A. AVINOFF.

(PLATES XXX-XXXIII.)

In the course of studying and arranging the Rhopalocera in the Carnegie Museum some species and forms have been found to be new to science and descriptions of them are given on the following pages.

The figures on the accompanying plates which will make the descriptions more intelligible and facilitate correct identification are of natural size. The types are preserved in the Carnegie Museum.

PAPILIONIDÆ.

Genus PAPILIO Linnæus.

1. *Papilio aurivillianus* sp. nov. (Pl. XXX, fig. 2.)

Allied to *P. latreillanus* Godart.

Upperside: Markings creamy-white without the green tinge, which is so characteristic of *P. latreillanus theorini*; without any ante-marginal markings; the markings of the discal band smaller, those in the median cell reduced to a sagittate cream-white spot opposite to the fifth marking in the discal row of maculations, not extended so far as to subtend the two terminal discal markings, as is the case in *P. latreillanus*. Antemarginal markings of the hind wings smaller than in *P. latreillanus*.

Underside: as in *P. latreillanus theorini*; the body with white markings on the sides, not tinged with orange at the extremity, as in that form.

In size somewhat larger than *P. theorini*.

The type, the only specimen of the female sex taken, was found at Lolodorf, Cameroon, together with a considerable series of males of *P. theorini*. It is barely possible that it may be a female of *P. theorini* and not a distinct species. In the literature there does not seem to be any reference to the female of *P. theorini*, except that Aurivillius in Seitz' "Grossschmetterlinge der Erde," makes the general remark concerning the whole *Tyndaræus*-group that 'both sexes are alike.' Apparently, if the female of *P. theorini* were known to its author as

being distinct in coloration and markings from the male, he would not have failed to mention it. Thus a probability remains that this butterfly is specifically distinct from *P. latreillanus*.

Length of dorsal margin of fore wing 55 mm.

Type: a unique female, from Lolodorf, Cameroons, C. M. Acc. No. 4366, A. I. Good, *coll.*

2. ***Papilio stewarti*** sp. nov. (Pl. XXX, fig. 1.)

Allied to *P. hellanichus* Hewitson and *P. scamander* Boisduval. Pattern of front wings similar to that of *P. hellanichus*, whereas the hind wings more closely approach the pattern of *P. scamander*.

Upperside: wings dark fuscous; front wings with seven straw-yellow spots forming one antemarginal row as in *P. hellanichus*; a discal row of nine larger spots running in a straighter line and further from the median cell than in *P. scamander*; the median cell terminating with a yellow spot as in *P. hellanichus*. Hind wings with a row of seven spots crossing the wing outside of the median cell as in *P. scamander*; six yellow antemarginal spots and an orange spot at the lower angle; the dark area between these series of spots irrorated with bluish scales in interneural spaces. The tail of hind wing twice as long as that of *P. scamander* and *P. hellanichus*.

Underside: front wings with the spots larger and lighter than on upper side; hind wings light yellow with the veins, which are black, narrowly margined on both sides with brown-black; a narrow irregular dark band crosses the median cell and extends to the internal border; there is a complete antemarginal band; between the latter and the discal band there are bluish irrorations; the antemarginal markings are yellow with the inside edges tinted with orange.

Body with double row of white lateral spots.

Length of dorsal margin of fore wing 50 mm.

Type: one male, Samaipata, Bolivia, 1500–2500 m., March, 1920; C. M. Acc. No. 6448, José Steinbach, *coll.*

I take pleasure in naming this species after Dr. Douglas Stewart, the Director of the Carnegie Museum.

3. ***Papilio garleppi*** Staudinger, ♀. (Pl. XXXI, fig. 1, ♂; fig. 2, ♀.)

The female of this species has never before been described or figured.

In general it resembles the *polybios*-form of *P. torquatus* Cramer, female. Hind wings deeply scalloped; the projections on M³ and M² are slenderer and more elongated than at the extremities of the other veins, but not produced as a tail on vein 3.

Upperside: front wing dark brown with a large double white patch adjacent to the median cell between median nervules two and four; succeeded below by a faint light streak. Hind wing with an antemarginal row of seven dull red spots; the second and third from the anal angle being the largest, the fourth smaller and pointed inwardly; above the four first markings is a row of four lunular dull red patches running across the interior discal part of the wing. The brown division between these two rows is narrow in the second and third interneural spaces; between the two red spots in the lower angle there is a suffusion of blue scales. The ground-color of the exterior part of the hind wings is somewhat darker.

Underside: the markings are similar to those of the upper side; the red antemarginal row of the hind wings more developed, and partly suffused with white scales.

Body brown with a narrow yellow lateral line.

Allotype: one female specimen from the Rio Japacani, 600 m., Bolivia, C. M. Acc. No. 5570, José Steinbach, *coll.* This female was accompanied by a series of males. Together with the female there is reproduced on Pl. XXX, fig. 1, a male of this rare species, which has not been heretofore figured.

PIERIDÆ.

Genus CATASTICTA Butler.

4. *Catasticta hollandi* sp. nov. (Pl. XXXII, fig. 2.)

Belongs in the group with *C. uricæcheæ* Felder. It is one of the largest species in the genus.

Upperside: black with light sulphur-yellow spots. The exterior black part strongly contrasts with the yellow median part of both wings. In the middle of this area is a row of sagittate yellow antemarginal spots parallel to the border. The marginal yellow markings are more developed on the hind wings than on the primaries. The black basal area of the front wings occupies a much larger extent than in *C. uricæcheæ*. On the hind wings it is narrower near the base. There is no trace of the deep red color which characterizes the lighter spots of *C. uricæcheæ*.

Underside: brown-black with white and yellow spots, similar in pattern to those of *A. uricæcheæ*: the band of yellowish white maculations in the discal part of the front wings more developed than in the latter species; the transverse discal white band of the hind wings twice the width of the corresponding band in *C. uricæcheæ* and *C. albifasciata* Lathy and Rosenberg. The yellow interneural markings are prominent.

Length of dorsal margin of fore wing 30 mm.

Type: one male from Peña Blanca, Santander, Colombia, February, 1917, C. M. Acc. No. 5935, Carriker, *coll.* The specimen was caught in the same locality with *C. uricæcheæ*.

This remarkable species is dedicated to Dr. W. J. Holland, the Director Emeritus of the Carnegie Museum.

5. **Catasticta nivalis** sp. nov. (Pl. XXXII, fig. 1.)

Allied to *C. corcyra* Felder.

Upperside: both wings pure white; apical part of front wings black, as in *C. corcyra*, but with a row of white spots along the inner part of this area; these white spots are not equally well developed in all the specimens of the series before me. Cilia of the front wings black; on the totally white hind wings the cilia are slightly black at the ends of the veins.

Underside: white; front wings with the apex reddish brown, marked by yellow interneural streaks; a few brownish markings at the end of the median cell, and more at its base. Hind wings irrorated with reddish brown; the yellow interneural streaks intercepted by an irregular discal fuscous band, composed of interneural brown spots, located in the middle of each of the yellow interspaces, and not coalescing with the brown suffusions on either side of the veins near the median cell, as in *C. corcyra*. The yellow streaks are extended into triangular maculations on the edge of the wings; veins brown; two basal red spots.

Length of dorsal margin of fore wing 23 mm.

Type: a male from Pueblo Nuevo de Ocaño, Colombia, 6000–7000 feet, September, 1916. Numerous paratypes from Los Ventañas, Santander, Colombia, and the type-locality, September 1–7, 1916; C. M. Acc. No. 5787, M. A. Carriker, Jr., *coll.*

6. **Catasticta flisa** Herrich-Schaeffer, **dilutior**, subsp. nov.

(Pl. XXXII, fig. 6, ♂; fig. 3, ♀.)

This subspecies differs from typical *C. flisa* in the greater extension of the white middle band of both wings; the white band is especially broad within toward the base of the wing. On the under side all the yellow markings of the secondaries at the apex of the primaries are much smaller and of a lemon-yellow, not golden-yellow color.

Length of costal margin of fore wing, ♂, 25 mm.; ♀, 27 mm.

Type: one male; one female, allotype; four females, paratypes. Chaochi, Colombia, C. M. Acc. No. 5430, ♂, Parish *coll.*; C. M. Acc. No. 5348, ♀, type, Parish, *coll.*

7. *Catanticta angulifera* sp. nov. (Pl. XXXII, fig. 4.)

Allied to *C. boliviana* Butler and *C. strigosa* Butler, with the same peculiar shape of the front wing, bent in the middle at the costal edge.

Upperside: brown; front wings with a diffused grayish spot at the end of the middle cell, and with two transverse rows of indistinct smoky-gray markings on the fore wing; the markings of the inner row do not extend inwardly so far toward the base, which is suffused with brown, as in *C. boliviana*; the brown part of the wing dividing the two rows runs more nearly parallel to the exterior border than in *C. boliviana* and *C. strigosa*, being further removed from the edge on the inner part of the wing. The five lighter spots in the outer part of the hind wing are indistinct and narrow; the lighter basal area is suffused with the brown ground-color, which spreads broadly along the veins, leaving the grayish coloration only on the interneural spaces.

Underside: lighter brown; two rows of yellowish markings and a spot in the middle cell are as on the upper side. Marginal interneural markings yellow; hind wings with yellow marginal triangular spots. As usual in the genus, a row of yellow spots in the middle of the cells, surmounted inwardly with dark brown markings, similar to those in *C. boliviana* and broader than those in *C. albina* Lathy and Rosenberg. The purplish coloration between the antemarginal rows of yellow spots is not so prominent as in *C. boliviana*. The transverse whitish discal band of markings indistinct, and the yellow antemarginal markings as in *C. boliviana* and *C. modesta* Lucas. The two usual red markings are found at the base of the hind wings.

Length of dorsal margin of fore wing 29 mm.

Type: female, C. M. Acc. No. 5282, S. M. Klages, coll., Las Quiguas, Venezuela.

8. *Catanticta lactea* sp. nov. (Pl. XXXII, fig. 5.)

Allied to *C. manco* Doubleday.

Upperside: yellowish white, instead of gray as in *C. manco*. This cream-color is sharply contrasted with the brown-black of the marginal part of the primaries. The brown-black basal and costal suffusion of the front wing extends over the median cell at the extremity, on which there occurs an indistinct creamy spot. The row of seven cream-colored antemarginal spots are larger than in *C. manco*; the small interneural spots on the edge are noticeable only near the apex. The extension of the cream-color on the hind wing is much greater than is the case with the corresponding gray color on the wing of *C. manco*. This light area on the inner part merges with the large arrow-shaped spots, which are plainly visible only on the front part. Marginal light spots more distinct toward the anal angle.

Underside: front wings cream-white, with the pattern of the upper side and the yellow marginal and apical markings smaller than in *C. manco*, the brown being more extended and thus reducing the size of the maculations. Hind wings brilliant white, as in *C. manco*, but the dark bands are wider, especially the discal and submarginal bands; all the yellow markings are deeper in color.

Length of dorsal margin of fore wing 24 mm.

Type: male, thirty-two male paratypes, C. M. Acc. No. 5348, Parish, *coll.*, Chaochi, Colombia, November, 1914.

9. *Ixias clarki* sp. nov. (Pl. XXX, fig. 3.)

Upperside: dark brown; inner third of front wings sulphur-yellow, with the brown-black coloration extending from the costal part across the base of the wings. An orange-yellow patch on the discal part of the wings, covering the end of the median cell and extending outwardly; a small black discocellular spot at the end of the cell, located approximately in the center of the orange-yellow patch; basal half of the hind wings, except a black area at the immediate base, sulphur-yellow, leaving a broad brownish black external area, which on both wings is more extended than in any other known species of the genus.

Underside: lemon-yellow; slightly irrorated with reddish brown scales in the marginal area and with the reddish brown antemarginal maculations characteristic of the genus on both wings. A triangular blackish spot at the inner angle of the front wing and a small black discocellular dot on both the front and hind wings.

Length of dorsal margin of fore wing 26 mm.

Type: a male from Baguio, Luzon, Philippine Islands, 5000 feet; three male paratypes from same locality; C. M. Acc. No. 5989, G. Haslam, *coll.*, B. Preston Clark, *don.*

This species is dedicated to Mr. B. Preston Clark, the generous friend of the Carnegie Museum, who donated the specimens, together with a number of other species taken at the same place.

10. *Catopsilia statira* Cramer, *schausi* subsp. nov. (albinic).

The male differs from the typical form in being uniformly white in color, with a slight general greenish tinge, as in the outer part of the wings in *C. statira*, without any accentuation of the basal yellow characteristic of typical *C. statira*. Female, like the normal *C. statira*, slightly yellow, with margins of wings narrowly black, and with a dark discal spot on the primaries.

Length of dorsal margin of fore-wing, ♂, 32 mm.; ♀, 31 mm.

Type: male; allotype, female; C. M. Acc. No. 6540, Wm. Schaus, *coll.*, Guatemala.

11. *Dismorphia spectabilis* sp. nov. (Pl. XXXIII, fig. 7.)

Allied to *D. tricolor* Grose-Smith, and *D. lysianax* Hewitson.

Upperside: brown-black; a broad oblique patch of sulphur-yellow on the primaries, extending from about the middle of the costa over the median cell toward the inner angle, reaching slightly over the second median vein; the end of the median cell with a brown-black spot coalescent inwardly with the ground-color. Before the apex are two diffused yellow spots, the front one being less distinct, which markings are not present in *D. lysianax* and *D. tricolor*. On the inner margin is a dull red stripe reaching slightly over the first median vein and not extending as far outwardly as in *D. lysianax* and *D. tricolor*; the tint of the red is intermediate between the bright red of *D. tricolor* and the usual fulvous of the allied *Dismorphias*. Hind wings similar to those of *D. tricolor*, except that the red is duller; the extent of the middle red band is longer, reaching the exterior slightly yellow-red spot, which is separate in *D. tricolor* and that the costal red band is broader.

Underside: similar to the upper side, but paler; three distinct yellow spots situated near the apex, the lower two externally marked with white; hind wings suffused with light brick-red, which remains distinct only at the base; seven white antemarginal interneural spots larger than in *D. tricolor*.

Length of dorsal margin of fore wing 30 mm.

Type: female, from River Japacani, Bolivia, C. M. Acc. No. 5047, José Steinbach, coll., August, 1913.

The present and the two allied species are each thus far only known from single female specimens. The correct locality of *D. tricolor* remains undetermined.

Since the foregoing description was written, the author has seen in a recent supplement of Seitz' "Gross-Schmetterlinge der Erde," the figure of a species, which may prove to be closely related to, or identical with, this form.

12. *Dismorphia lysandra* sp. nov. (Pl. XXXIII, fig. 5, ♂; fig. 6, ♀.)

Allied to *D. lysinoides* Staudinger and *D. lysinoe* Hewitson.

Upperside: front wings with a transverse milky white band as in *D. lysinoe* and two milky white spots, one outside of the costal end of the median cell and another between the second and third median nervules. A transparent line follows the inner edge of the median cell from the base to three-quarters of its length, as in *D. lysinoe*. Hind wings with white costal and orange antemarginal bands externally framed with a black edge and inwardly with a broad black band reaching the median cell; veins outside of the white area covered with black scales.

Underside: with a row of white antemarginal spots on both wings; upper wings with a fuscous suffusion between these spots and the white band; inner half of the wing white. Hind wing with a black discal area, semi-transparent in the median cell; a somewhat diffused orange band running along the costal side of the median cell, terminating in a white spot, between which and the three enlarged antemarginal spots is extended the extremity of the orange antemarginal band; base at costa bright orange. Underside of abdomen whitish, contrasting with the dark dorsum.

The female is marked like the male, but on the upperside the apical and subapical light spots are relatively smaller, the longitudinal band on the cell is broader and curved, bending outwardly so as to cross the lower margin of the cell near its outer extremity. The hind wings, which are relatively smaller than in the males, are on the upperside uniformly dark in color on the costal margin, due to the absence of the sexual branding of the male. The underside corresponds in the main to the same side of the male, except that the small white subapical spot of the hind wing is much smaller.

Length of dorsal margin of forewing, ♂, 25 mm.; ♀, 22 mm.

Type: male; allotype, female; paratypes, one male, one female, C. M. Acc. No. 7088, S. M. Klages *coll.*, Arima, Rio Purús, Brazil, November, 1922.

13. ***Dismorphia leuconoe*** Bates, subsp. ***melanina*** subsp. nov.

(Pl. XXXIII, fig. 2.)

Differs from the form *D. melanoides* Röber, reproduced in Seitz' "Gross-Schmetterlinge der Erde," Vol. V, pl. 30, in the absence of orange in the two hyaline spots near the margin of the front wing and in having the transparent basal markings shorter.

Length of dorsal margin of fore wing 25 mm.

Type: one female from Pied Saut, Oyapok River, French Guiana, C. M. Acc. No. 6111, S. M. Klages *coll.*, November, 1922.

14. ***Dismorphia pinthæus*** Linnæus, subsp. ***gracilis***, subsp. nov.

(Pl. XXXIII, fig. 4.)

Differs from the typical and other subspecific forms in having the sulphur-yellow on both sides of the wings replaced by white. Extent of the dark pattern reduced as in *D. pinthæus* subsp. *amelina* Hopffer, the basal marking of the primaries being reduced almost as in typical *D. pinthæus*.

Length of dorsal margin of fore wing 21 mm.

Type: one male; two male paratypes, C. M. Acc. No. 7088, S. M. Klages *coll.*, November, 1922, at Arima, Rio Purús, Brazil.

15. *Dismorphia spio* Godart, aberr. *virago*, aberr. nov.

(Pl. XXXIII, fig. 1.)

The usual lemon-yellow color of the female is replaced by bright orange, as in the male.

Length of dorsal margin of fore wing 33 mm.

Type: one female, C. M. Acc. No. 4609, W. W. Worthington, *coll.*, Arjuntas, Porto Rico, April, 1912.

16. *Dismorphia astynome* Dalman, *chloronome*, subsp. nov.

(Pl. XXXIII, fig. 3.)

Two yellow apical spots, as in *D. astynome* Dalman; yellow in discal parts very much extended and merging with the basal reddish orange, in which area the black is limited to the narrow outlines of the veins; a small discocellular spot and a cuneiform marking in the median cell. The white area of the hind wings is reduced in extent as in *D. astynome*.

Length of dorsal margin of fore wing 25 mm.

Type: one male, C. M. Acc. No. 3564, Sete Lagoas, Minas Geraes, Brazil, J. D. Haseman *coll.*, May 6, 1908.

Genus TERIAS Swainson.

17. *Terias tenera* sp. nov. (Pl. XXXI, fig. 4.)

Belongs to the group of *T. dina* Boisduval and *T. calceolaria* Butler; wings rounded.

Upperside: bright chrome-yellow with narrow black margins on both wings, growing slightly and gradually broader toward the apex of the fore wings.

Underside: with a few indistinct brown spots near the apex of the front wings and two brown spots near the front angle of the hind wings, and one faint diffused reddish spot on the edge of the hind wings at the anterior angle.

Length of discal border of fore wing 16 mm.

Type: one male, C. M. Acc. No. 4609, W. W. Worthington *coll.*, Guayana, Porto Rico, March, 1912.

18. *T. arbela* Hübner, *gracilis*, subsp. nov. (Pl. XXXI, fig. 3.)

Upperside: differs from the typical form in having the basal part of the hind wings whitish, which color gradually flows into yellow.

tinged with orange, at the anterior angle. The coloration of this butterfly, not the character of the marginal bands, is similar to that of *T. gratiosa* Doubleday and Hewitson.

Underside: pale yellow; brown markings of the hind wings well developed, but the reticulations reduced to a few spots.

Length of dorsal margin of fore wing 20 mm.

Type: one male, C. M. Acc. No. 3441, Haseman *coll.*, Bom Fim, Bahia, Brazil, November, 1907.

Family DANAIDÆ.

SUBFAMILY ITHOMIINÆ.

Genus SAIS Hübner.

19. *Sais klagesi* sp. nov. (Pl. XXXIII, fig. 8.)

Occupies an intermediate position between *S. paraënsis* Haensch and *S. promissa* Weymer. The shape of wings is broad as in *S. promissa*.

Upperside: primaries as in *S. paraënsis*, ground-color chestnut brown; an irregular transverse yellow subapical band; two blackish partly coalescent spots at the end of the median cell adjacent to the yellow band. Apical part uniformly brownish-black, or in some specimens with very indistinct chestnut-brown streaks along the veins. This type of maculation represents in a rudimentary state the interrupted broadly reddish brown suffusion of the corresponding part of the wing in *S. promissa* and *S. zitella* Hewitson, whereas in the forms of *S. paraënsis*, the lighter subapical irroration takes the form of an uninterrupted subapical band. Hind wings as in *S. promissa* and *S. zitella* with a discal band of brown-black spots and a marginal blackish area with the ground-color between these two bands of a darker chestnut tinge, interrupted by lighter coloration along the veins.

Underside: like the upper side, but lighter in color, both wings with the usual antemarginal whitish points.

More ample materials may prove that *S. zitella*, *promissa*, and the above described form, are specifically connected, representing local races of the same species.

Length of dorsal margin of fore wing 29 mm.

Type: male, C. M. Acc. No. 6963, S. M. Klages *coll.*, Hyutanahan, Rio Purús, Brazil, March, 1922; four male paratypes from the same locality, and two from Nova Olinda, Rio Purús.

Family NYMPHALIDÆ.

SUBFAMILY HELICONIINÆ.

Genus HELICONIUS Latreille.

20. *Heliconius doris* Linnæus, *alberato*, subsp. nov.

Like *H. doris* subsp. *eratonius* Staudinger, but the yellow markings of the front wings replaced by pure white. The red area of the hind wings is produced in somewhat shorter rays, as in *H. transiens* Staudinger.

Length of dorsal margin of fore wing 42 mm.

Type: male, and one male paratype; C. M. Acc. No. 5538, S. M. Klages coll., Las Quiguas, Esteban Valley, northern Venezuela.

21. *Heliconius doris* Linnæus, *azurea*, subsp. nov.

(Pl. XXXIII, fig. 9.)

Like *H. doris cæruleata* Stichel, but with pure white instead of yellow markings on the front wings, similar to the preceding form. The blue basal area of the hind wings with short rays external to the median cell.

Length of dorsal margin of fore wing 41 mm.

Type: male, and two male paratypes, C. M. Acc. No. 5538, S. M. Klages coll., La Cumbre de Valencia, Venezuela, 4500 feet.

22. *Heliconius insolitus*, sp. nov. (Pl. XXXII, fig. 9.)

Allied to *H. novatus* Bates, from which it differs in having the apical spots and discal band not divided by the usual brown-black of the ground-color, but by russet, the brown-black being restricted entirely to the narrow suffusion along the veins. The brown-black is altogether much reduced in comparison with *H. novatus*, remaining in the normal proportions only on the outer part of the wings between veins two and four. The yellow in the interspace between veins two and three is almost covered by the russet ground-color. On the hind wings the brown-black margins of the discal row are much extended inwardly toward the median cell.

On the underside, which is similar to that of *H. novatus*, the marginal white spots are smaller. The discal markings of the hind wings are more extended than on the upper side.

Length of costal margin of fore wing 43 mm.

Type: a unique male, C. M. Acc. No. 5044, J. Steinbach coll., Provincia del Sara, Bolivia, 450 m.

SUBFAMILY NYMPHALINÆ

Genus JUNONIA Hübner.

23. *Junonia cœnia* Hübner, *bergi*, subsp. nov.

(Pl. XXXII, fig. 7, ♂; fig. 8, ♀.)

Differs from the typical form in being smaller in size.

Upperside: more contrasting in color; the whitish band on the front wings of a purer color; ground-color dark brown, with the orange-russet well developed; eyes on the hind wings big and well defined.

Underside: lighter sand-yellowish, not as mottled as in the typical North American continental form, represented on Hübner's original plate. The black blue centered eyes of the hind wings more conspicuous than in the typical form.

Length of dorsal margin of fore wing, ♂, 21 mm.; ♀, 23 mm.

Type: male; allotype female; paratypes, thirty-one males and twelve females, C. M. Acc. No. 7418, St. George, Bermudas, Count B. Berg and A. Avinoff *coll.*, early July, 1924.

EXPLANATION OF PLATE XXX.

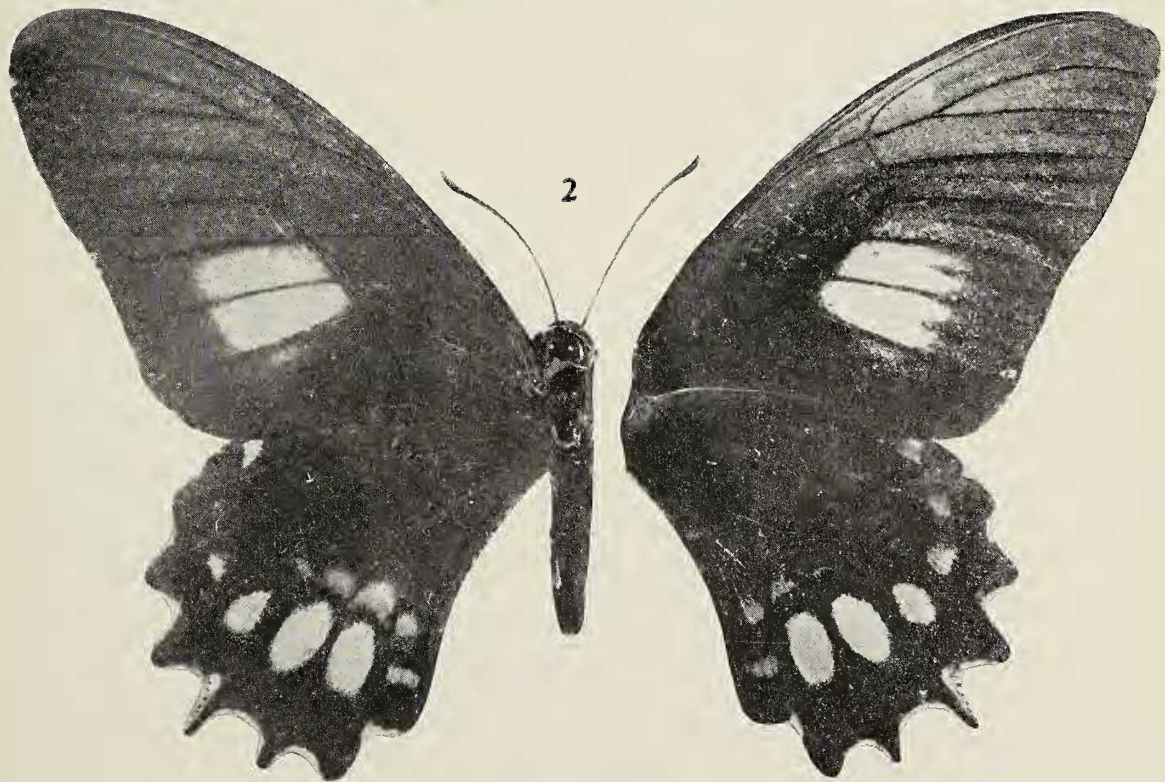
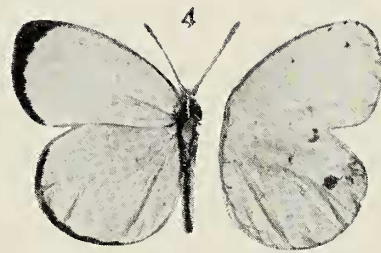
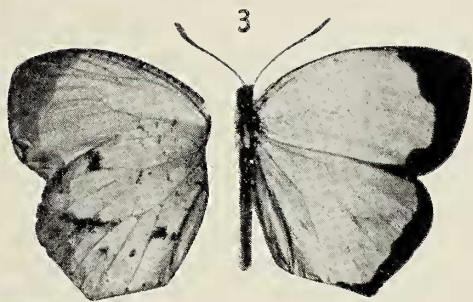
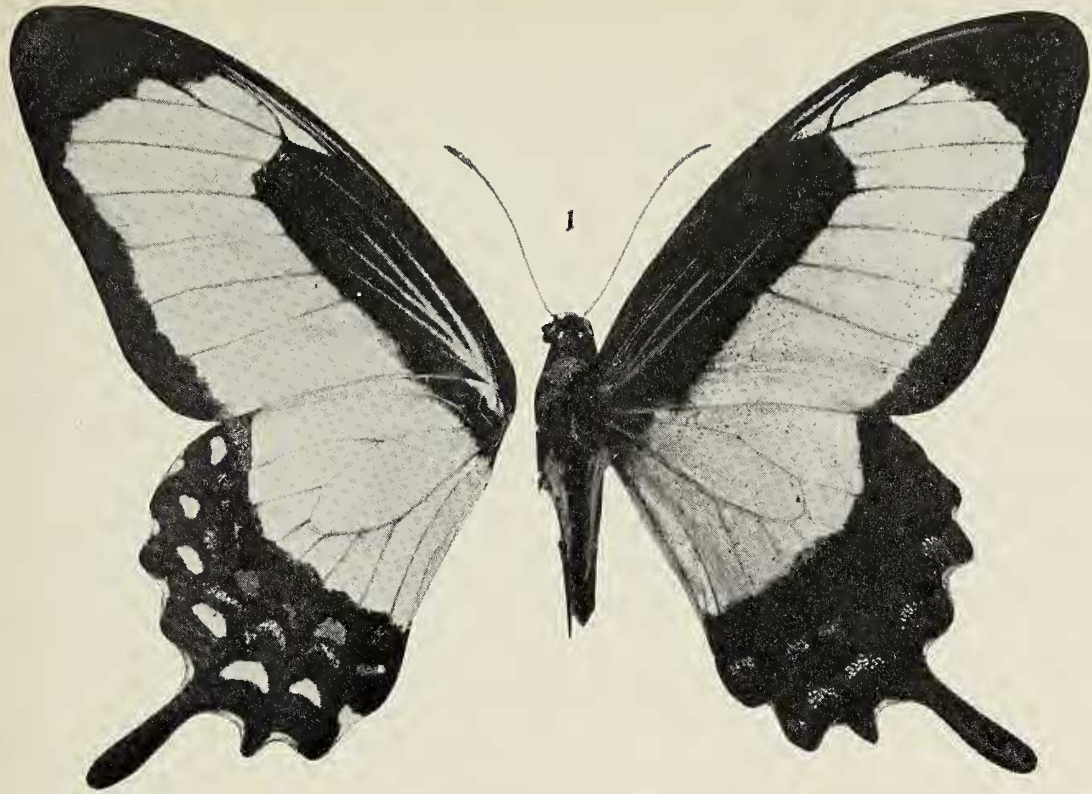
- FIG. 1. *Papilio stewarti* Avinoff, sp. nov., ♂, type.
FIG. 2. *Papilio aurivillianus* Avinoff, sp. nov., ♀, type.
FIG. 3. *Ixias clarki* Avinoff, sp. nov., ♂, type.



Papilio, Ixias.

EXPLANATION OF PLATE XXXI.

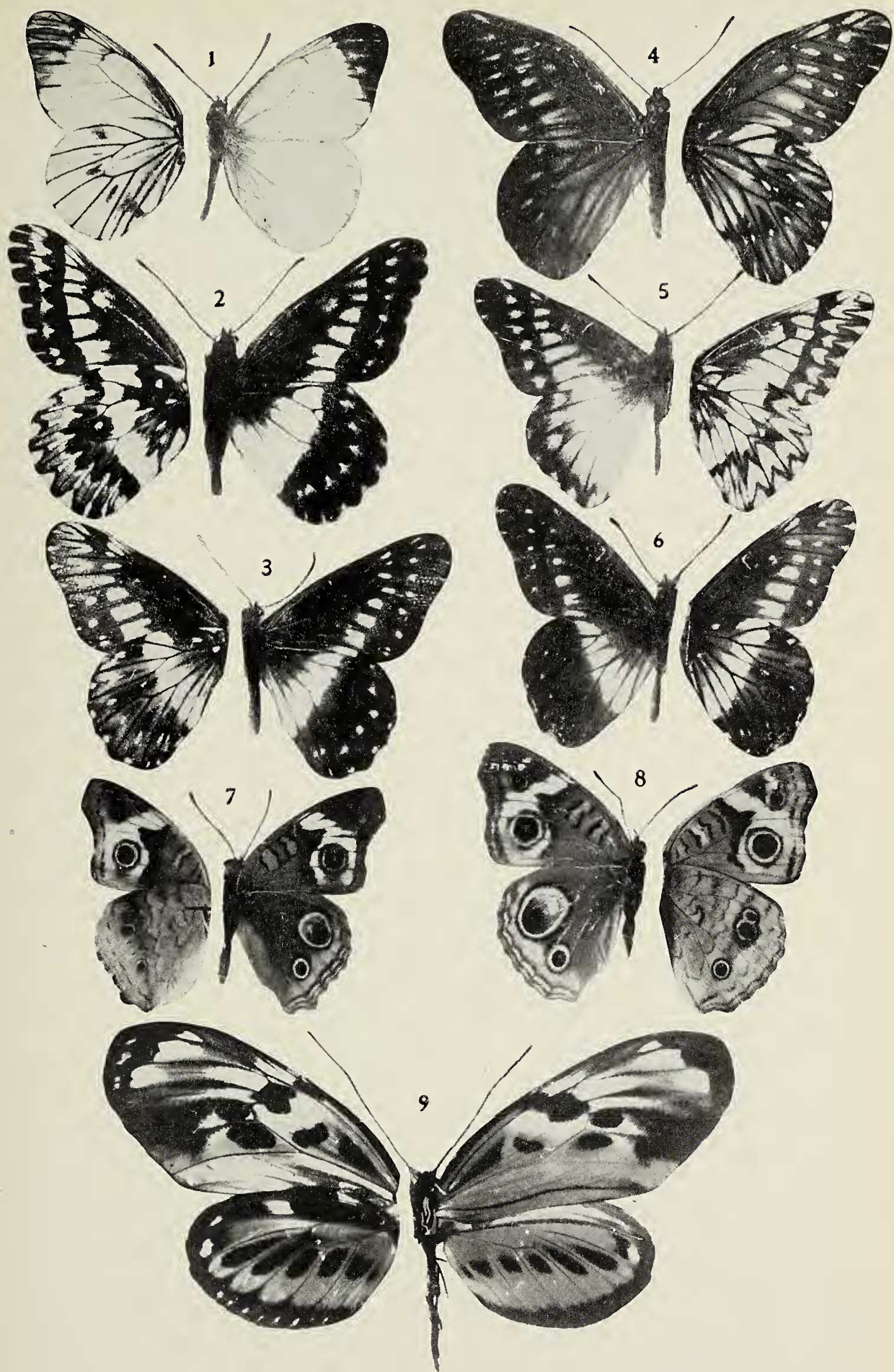
- FIG. 1. *Papilio garleppi* Staudinger, ♂.
FIG. 2. *Papilio garleppi* Staudinger, ♀, *allotype*.
FIG. 3. *Terias arbela* Hübner, subsp. *gracilis* Avinoff, subsp. nov., ♂, *type*.
FIG. 4. *Terias tenera* Avinoff, sp. nov., ♂, *type*.



Papilio, Terias.

EXPLANATION OF PLATE XXXII.

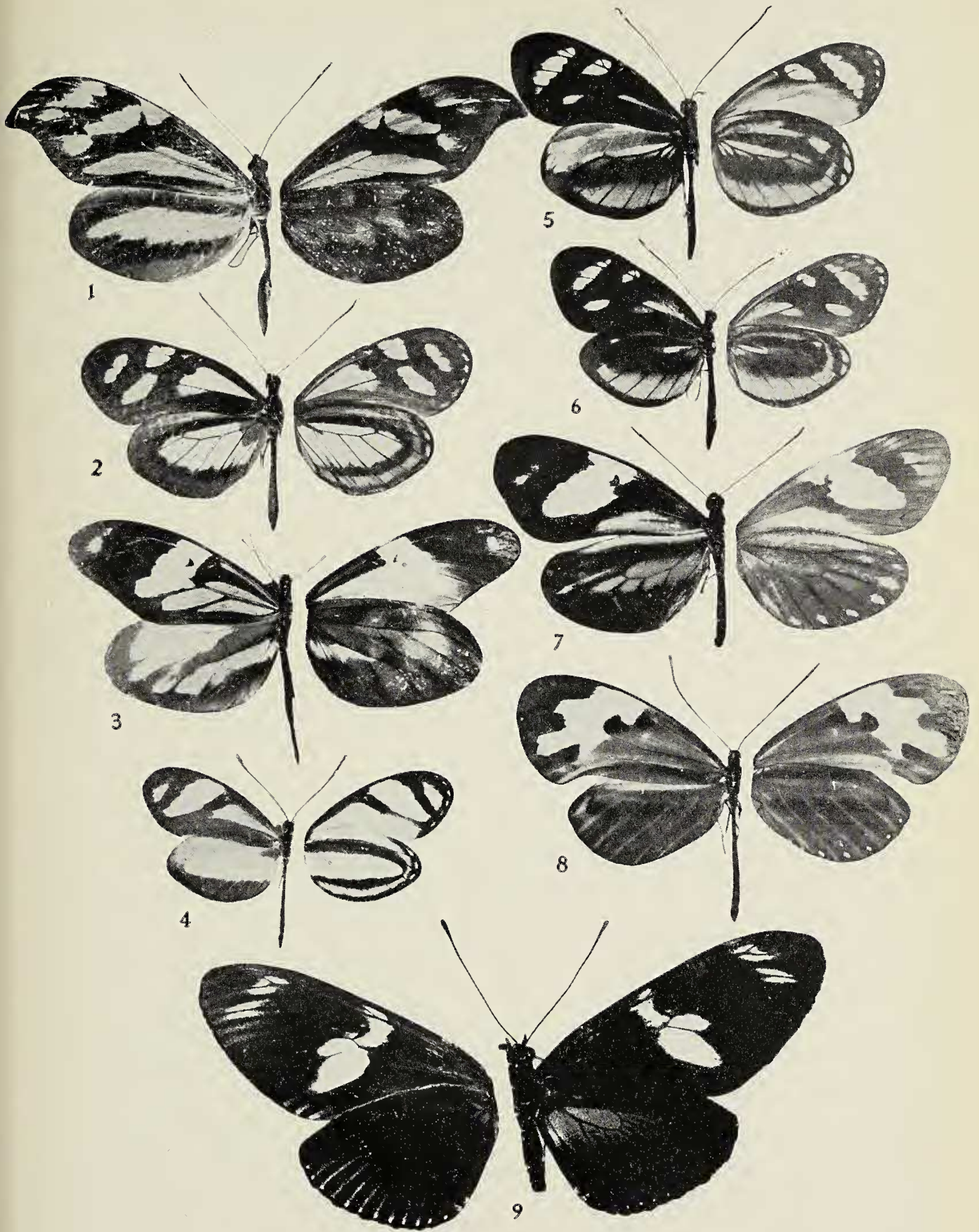
- FIG. 1. *Catantia nivalis* Avinoff, sp. nov., ♂, type.
FIG. 2. *Catantia hollandi* Avinoff, sp. nov., ♂, type.
FIG. 3. *Catantia flisa* Herrich-Schaeffer, *dilutior* Avinoff, subsp. nov., ♀, allotype.
FIG. 4. *Catantia angulifera* Avinoff, sp. nov., ♀, type.
FIG. 5. *Catantia lactea* Avinoff, sp. nov., ♂, type.
FIG. 6. *Catantia flisa* Herrich-Schaeffer, *dilutior* Avinoff, subsp. nov., ♂, type.
FIG. 7. *Junonia cœnia* Hübner, *bergi* Avinoff, subsp. nov., ♂, type.
FIG. 8. *Junonia cœnia* Hübner, *bergi* Avinoff, subsp. nov., ♀, allotype.
FIG. 9. *Heliconius insolitus* Avinoff, sp. nov., ♂, type.



Catasticta, Junonia, Heliconius.

EXPLANATION OF PLATE XXXIII.

- FIG. 1. *Dismorphia spio* Godart, aberr. *virago* Avinoff, aberr. nov., ♀, type.
FIG. 2. *Dismorphia leuconoe* Bates, *melanina* Avinoff, subsp. nov., ♀, type.
FIG. 3. *Dismorphia astynome* Dalman, *chloronome* Avinoff, subsp. nov., ♀, type.
FIG. 4. *Dismorphia pinthæus* Linnæus, *gracilis* Avinoff, subsp. nov., ♂, type.
FIG. 5. *Dismorphia lysandra* Avinoff, sp. nov., ♀, type.
FIG. 6. *Dismorphia lysandra* Avinoff, sp. nov., ♂, allotype.
FIG. 7. *Dismorphia spectabilis* Avinoff, sp. nov., ♀, type.
FIG. 8. *Sais klagesi* Avinoff, sp. nov., ♂, type.
FIG. 9. *Heliconius doris* Linnæus, *azureus* Avinoff, subsp. nov., ♀, type.



Dismorphia, Sais, Heliconius.